

The Safe Motherhood Initiative: Why Has It Stalled?

ABSTRACT

Complications of pregnancy and childbirth are still the leading cause of death and disability among women of reproductive age in developing countries. After decades of neglect, the founding of the Safe Motherhood Initiative in 1987 promised action on this problem. A dozen years later, there is no evidence that maternal mortality has declined and there are still few sizeable programs. A major reason for this disappointing record is that the initiative lacks a clear, concise, feasible strategy.

This article reviews the available options and proposes a strategy based on improving the availability and quality of medical treatment of obstetric complications. Once district hospitals and health centers provide such needed care, community mobilization to improve utilization may be beneficial. Substantial reductions in maternal deaths would be possible in a relatively short period of time if this strategy were embraced. (*Am J Public Health*. 1999;89:480-482)

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"A deep, dark continuous stream of mortality . . . how long is this sacrifice to go on?" William Farr, the first registrar general of England and Wales, asked this question about maternal mortality in England in 1838¹; a century and a half later, we still have not answered it. While the risk of dying in childbirth is now very slight in industrialized countries, in large parts of Africa, Asia, and Latin America maternal mortality is still an everyday event. According to estimates by the World Health Organization (WHO), 585 000 women die each year—more than one each minute—of pregnancy-related causes.² Nearly all of these deaths take place in developing countries. At present, an estimated 1 woman in 12 will die of maternal causes in West Africa, compared with 1 woman in 4000 in northern Europe.

In 1985, we published an article with the subtitle "Where's the M in MCH?"³ In that paper, we asserted that the problem of pregnancy-related deaths among women in developing countries had been neglected by the medical, obstetric and public health communities. We pointed out that conventional maternal and child health programs focused primarily on the health of infants and young children, not on the health of women, and that consequently these programs would not reduce maternal deaths. We called for a major initiative by the health and development communities to address this problem, with obstetricians and the World Bank in the lead.

Since 1985, maternal mortality (and women's health in general) has received a great deal more attention than it had previously. The Safe Motherhood Initiative was launched at an international conference in Nairobi in 1987. A series of national and regional Safe Motherhood meetings, to raise awareness among policy makers, followed the conference. The obstetric community has also become more involved—at the 1998 meeting of the International Federation of

Obstetrics and Gynaecology, there were plenary sessions on maternal mortality in developing countries, and a program of collaboration between obstetrics societies in developed and developing countries was begun.

Despite such advances, however, relatively few large programs focus directly on pregnancy-related deaths in developing countries, and maternal mortality has apparently not decreased.² Why has there been so little progress? The explanation does not lie in a lack of knowledge. The causes of maternal deaths are well known and are remarkably similar in developed and developing countries. Of the 5 leading causes of maternal deaths in developing countries, 3 are still among the leading causes in the United States—hemorrhage, infection, and hypertensive disorders (sometimes called toxemia or eclampsia).^{4,6} The other 2 leading causes of maternal death in developing countries, obstructed labor and complications of a botched (usually illicit) abortion, were common causes in the West until the second half of this century. The means of averting almost all maternal deaths have been available for 60 years.

The lack of progress, we believe, is not due primarily to scarcity of resources. Although relatively little money has been allocated to this initiative (as compared with child survival or family planning), and some reallocation of national health and donor budgets is needed, a great deal could be accomplished in many countries by making better use of existing resources.

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In our view, an important reason for the lack of progress in reducing maternal mortality is the absence of a clear strategic focus in the Safe Motherhood Initiative. One of the keys to the success of the Child Survival Initiative was that it gave governments and international agencies a short list of actions required to prevent deaths among young children from the most common causes. UNICEF used the acronym GOBI to remind people of the 4 main activities needed to reduce child mortality—growth monitoring, oral rehydration for diarrheal disease, breast-feeding, and immunization.⁵

In contrast, the Safe Motherhood Initiative is much broader. According to WHO, the initiative encompasses family planning, antenatal care, clean/safe delivery, essential obstetric care, basic maternity care, primary health care, and equity for women.⁶ While all of these are clearly worthy and important goals, in fact only one, essential obstetric care, includes actions that can substantially reduce maternal deaths.

From a practical perspective, this broad focus has unfortunate consequences. First, some policy makers and programme managers believe that they are already conducting Safe Motherhood programs because, as they understand it, the activities comprise their usual activities—antenatal care, family planning, nutrition, etc. Other policy makers feel that although Safe Motherhood is a laudable goal, attaining it would require dauntingly vast efforts.

The lack of focus in the global Safe Motherhood Initiative has been fueled by misconceptions about how maternal mortality might be reduced. One common misconception is that maternal mortality can be reduced through general socioeconomic development (i.e., improvements in women's nutrition, education, and social status). Evidence from a variety of settings has shown that this is not true. In fact, maternal mortality, unusual among public health problems, is primarily affected by institutionally-based medical interventions. Two examples clearly illustrate this fact.

In the 19th century, living conditions (nutrition, sanitation, etc.) improved in Europe and North America. This resulted in sustained and impressive declines in infant mortality and in deaths from infectious diseases, such as tuberculosis among adults, long before medical technology to fight these diseases was developed. During this period, however, maternal mortality did not decline. From 1840 (when the first maternal mortality statistics were available), maternal mortality in Britain remained high for almost a century, while mortality from most other causes declined dramatically.

Then, beginning in the mid-1930s, maternal mortality in Europe and North America declined so sharply that within a relatively short period of time it was no longer a major public health problem. In 1934, there were 441 maternal deaths per 100 000 births in England and Wales. By 1950 there were 87, and in 1960 there were 39. Similar patterns obtained in European countries and in the United States.⁷ This decline occurred in large part because the technology to treat obstetric complications became available, including antibiotics (first sulfa drugs and then penicillin for infection, including infection resulting from illicit abortion), banked blood, and safer surgical techniques for cesarean deliveries.

By contrast, in the United States there is presently a religious community whose members do not make use of modern medical care, even in emergencies.⁸ This community is prosperous, and its members are well educated and well fed. In 1982, the maternal mortality ratio was 872 maternal deaths per 100 000 live births in this community—a ratio more than 100 times higher than the level of maternal mortality in the US population as a whole and even higher than the contemporary level for Bangladesh.^{9,10}

A second misconception about maternal deaths is that they can be prevented through antenatal care programs in which obstetric complications can either be detected early and treated or at least predicted through screening for risk factors. Again, the literature does not support this approach. Most obstetric complications can be neither predicted nor prevented, as the following example illustrates.

In a rural area of the Gambia, pregnant women were provided exemplary prenatal care as part of a 1982–1983 research project of Britain's Medical Research Council.¹¹ The women were screened for risk twice during pregnancy and received urine tests to detect toxemia. Each woman was visited once a month, and any illness detected was treated. There was, however, no medical facility nearby at which obstetric complications could be treated. Maternal mortality was extremely high, the equivalent of more than 2000 maternal deaths per 100 000 live births. The researchers, reviewing the data at the end of the project, found that risk factors were not helpful in identifying which women were most likely to die.

The inefficacy of risk screening in this study may be surprising to many readers. After all, there are well-documented relationships between maternal mortality and such factors as maternal age and parity.¹² But risk factors identify groups of women with higher-than-average likelihood of obstetric complications and (consequently)

death; risk factors do not predict which individuals will have complications. In fact, the vast majority of high-risk women will deliver without incident. Furthermore, most women who develop life-threatening complications belong to low-risk groups.

While most obstetric complications can be neither predicted nor prevented, they can be successfully treated. And yet, emergency obstetric care has received amazingly little attention. This is particularly surprising because emergency obstetric care would be necessary even if obstetric emergencies could be predicted; “high-risk” women would still need reasonable access to adequate medical care. The best strategy is to assume that all pregnant women are at risk for serious complications and to focus efforts on improving the quality of, access to, and utilization of emergency obstetric care services.

In order to improve access to emergency obstetric care, a number of commonly held assumptions must be challenged and changed. One such assumption is that, in all circumstances, “prevention is better than cure.” This idea has been inculcated into generations of health providers and public health professionals, contributing to the belief that antenatal care and trained traditional birth attendants could reduce maternal mortality, and it has led to considerable resistance to the emphasis on treatment of complications. Fortunately, however, the importance of emergency obstetric care in preventing maternal deaths has gradually been accepted by most international agencies during the last 5 years.^{6,13,14}

Another assumption that hinders the adoption of a targeted approach to maternal mortality has been the fear that it would bring a return to the policies of the 1950s and 1960s, during which western models of health care were exported to some developing countries. This was reflected in the growth of what Halfdan Mahler (the former Director General of WHO) called “disease palaces” in large cities in developing countries, while the majority of people who lived in rural areas were virtually ignored.¹⁵ Improving the availability of emergency obstetric care does not mean reverting to this model. Improving access to emergency obstetric care means upgrading services that people can reach, such as district hospitals and health centers. While obstetric surgery (such as cesarean delivery for obstructed labor) requires a hospital facility, many other life-saving procedures can be carried out in health centers and first-aid posts. For example, for postpartum hemorrhage, which can kill in a matter of hours, treatment and first aid (e.g., manual removal of the placenta and injection of ergometrine) need to be available

at the most peripheral level of the health care system.

It is often assumed that improving emergency obstetric care is too costly. This assumption implies that other solutions exist that are equally effective but cheaper. In the case of maternal mortality, this is not true. No matter how many resources are devoted to improving women's education and nutrition, or to prenatal care and training traditional birth attendants, no substantial reduction in maternal mortality will result without access to emergency obstetric care. Effectiveness, in turn, strongly influences cost-effectiveness. An intervention that is not effective can never be cost-effective. Therefore, seemingly less expensive interventions, such as antenatal care and traditional birth attendant training, are much less cost-effective than providing emergency obstetric care.¹⁶ The one exception to this rule is the provision of family planning services at the community level, which will help to decrease numbers of unwanted and unplanned pregnancies.

Furthermore, most of the cost of providing emergency obstetric care is already being paid. For example, in Bangladesh—one of the poorest countries in the world—there is an extensive medical system of hospitals, health centers, and health posts throughout the country, and most positions for physicians are filled. The expense of improving the functioning of an emergency obstetric care system is not that of building up the system from nothing but of improving what already exists. The primary problems faced by hospitals in developing countries are supervision, accountability, training, supply distribution, and drug availability—essentially management and fiscal problems. Where shortages of drugs are endemic, solutions can be developed.¹⁷

Finally, fears that Safe Motherhood might become a new “vertical” program are unfounded, because emergency obstetric care must be provided through the health system.¹⁸ Nor does emphasizing emergency obstetric care mean that community-based

efforts have no place. Improving access to emergency obstetric care is the first and absolutely necessary step. Once services are available and functioning, however, people need to know where they are and when to use them. And, given the realities of many developing countries, families and communities will need to provide women with transportation and money for fees and supplies. Thus, the community has important functions in ensuring that women with pregnancy complications receive prompt, adequate care.

Although few women in developing countries have yet benefited from the Safe Motherhood Initiative, we believe that the organizational capacity and the international and national resources exist to significantly reduce maternal mortality. Widespread availability of and access to emergency obstetric services would be a dramatic breakthrough for women in developing countries.

Solutions to a major public health problem that do not require technological breakthroughs are rare. In this case, we know what is needed; the challenge is to put our knowledge to work. □

Contributors

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